

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A tool management method comprising the steps of:
receiving a first request from a client system via a network;
determining a first type of said first request using a first predetermined field in a portion of said first request; and
sending a first message to a tool in response to said first request and said first request type, wherein said first message is operable for controlling an action of said the tool.
2. (Original) The method of claim 1 further comprising the step of determining an identification of a tool object corresponding to said tool using a second predetermined field in said portion of said request.
3. (Canceled).
4. (Currently Amended) The method of claim 1 3 further comprising the steps of:
receiving a wherein said tool returns at least one second message from said tool
associated with said first action; and, ~~said method further comprising the step of~~
caching said ~~at least one~~ second message.
5. (Currently Amended) The method of claim 4 further comprising the steps of:
receiving a second request from said client system via said network;
retrieving ~~selected ones of said at least one~~ second message; and
generating a response to said a second request using said ~~selected ones of said~~

~~at least one~~ second message.

6. (Currently Amended) The method of claim 5 further comprising the step of sending said response to said a client system ~~initiating said first and second requests.~~

7. (Canceled).

8. (Currently Amended) The method of claim 1 further comprising the steps of:
receiving a connection request from said client system; and
opening a connection to said a client system, said connection being operable for communicating requests and responses to said requests.

9. (Currently Amended) The method of claim 1 further comprising the steps of:
receiving a second request from said client system via said network, said second request selected from the group consisting of information (~~INFO~~) requests, expand requests and edit requests, wherein,

in response to ~~each of~~ said information requests, an HTML page is generated using a set of selected data for a tool object corresponding to a managed tool ~~is loaded into a WorldWideWeb ("Web") page~~ for sending to said a client system,

in response to ~~each of~~ said edit requests, an HTML page is generated a ~~Web page~~ having a portion operable for user entry of one or more values for modifying a tool object attribute ~~is generated~~ for sending to said client system, and

in response to ~~each of~~ said expand requests an HTML page is generated using a set of child object names and relations to a parent object identified in said each expand request ~~is generated~~ for sending to said client system.

10. (Currently Amended) The method of claim 1 wherein said first type of said

first request denotes an execute request.

11. (Original) The method of claim 1 wherein said step of sending said first message is in response to execution of a tool object method identified in said first request.

12. (Original) The method of claim 11 further comprising the step of overriding said tool object method.

13. (Original) The method of claim 12 wherein said step of overriding said tool object method comprises the steps of:

parsing a script source;

determining if said script source includes a method signature matching a method signature of said tool object method; and

if so, executing a corresponding portion of said script source.

14. (Currently Amended) The method of claim 1 ~~7~~ wherein said first request is transferred in accordance with ~~transfer protocol~~ is the hypertext transfer protocol (HTTP), and said first portion corresponds to a ~~first field in~~ a uniform resource locator (URL) ~~path~~.

15. (Currently Amended) A data processing system comprising:

circuitry operable for receiving a first request from a client system via a network;

circuitry operable for determining a first type of said first request using a first predetermined field in a portion of said first request; and

circuitry operable for sending a first message to a tool in response to said first request and said first request type, wherein said first message is operable for controlling

an action of said ~~the~~ tool.

16. (Original) The data processing system of claim 15 further comprising the circuitry for determining an identification of a tool object corresponding to said tool using a second predetermined field in said portion of said request.

17. (Canceled).

18. (Currently Amended) The data processing system of claim ~~15~~ ~~47~~ further comprising:

circuitry operable for receiving a ~~wherein said tool returns at least one second message from said tool~~ associated with said first action; and ~~said method further comprising the step of~~

circuitry operable for caching said ~~at least one second message.~~

19. (Currently Amended) The data processing system of claim 18 further comprising:

circuitry operable for receiving a second request from said client system via said network;

circuitry operable for retrieving ~~selected ones of said at least one second message; and~~

circuitry operable for generating a response to said a second request using said ~~selected ones of said at least one second message.~~

20. (Currently Amended) The data processing system of claim 19 further comprising circuitry operable for sending said response to said a client system ~~initiating said first and second requests.~~

21. (Currently Amended) The data processing system of claim 15 further comprising:

circuitry operable for receiving a connection request from said client system; and

circuitry operable for opening a connection to said a client system, said connection being operable for communicating requests and responses to said requests.

22. (Currently Amended) The data processing system of claim 15 further comprising:

circuitry operable for receiving a second request from said client system via said network, said second request selected from the group consisting of information (~~INFO~~) requests, expand requests and edit requests, wherein,

in response to ~~each of~~ said information requests, an HTML page is generated using a set of selected data for a tool object corresponding to a managed tool ~~is loaded into a WorldWideWeb ("Web") page for sending to~~ said a client system,

in response to ~~each of~~ said edit requests, an HTML page is generated a Web page having a portion operable for user entry of one or more values for modifying a tool object attribute ~~is generated for sending to~~ said client system, and

in response to ~~each of~~ said expand requests an HTML page is generated using a set of child object names and relations to a parent object identified in said each expand request ~~is generated for sending to~~ said client system.

23. (Currently Amended) The data processing system of claim 15 wherein said first type of said first request denotes an execute request.

24. (Original) The data processing system of claim 15 wherein said step of sending said first message is in response to execution of a tool object method identified

in said first request.

25. (Original) The data processing system of claim 24 further comprising circuitry operable for overriding said tool object method.

26. (Original) The data processing system of claim 25 wherein said circuitry operable for overriding said tool object method comprises:

circuitry operable for parsing a script source;

circuitry operable for determining if said script source includes a method signature matching a method signature of said tool object method; and

circuitry operable for executing a corresponding portion of said script source, if so.

27. (Currently Amended) A computer program product embodied in a tangible storage medium, the program product including instructions ~~a program of instruction~~ for performing the steps of:

receiving a first request from a client system via a network;

determining a first type of said first request using a first predetermined field in a portion of said first request; and

sending a first message to a tool in response to said first request and said first request type wherein said first message is operable for controlling an action of said ~~the~~ tool.

28. (Original) The program product of claim 27 further comprising instructions for performing the step of determining an identification of a tool object corresponding to said tool using a second predetermined field in said portion of said request.

29. (Canceled).

30. (Currently Amended) The program product of claim ~~27~~ 29 further comprising instructions for performing the steps of:

receiving a ~~wherein said tool returns at least one~~ second message from said tool associated with said first action; ~~and, said method further comprising the step of~~
caching said ~~at least one~~ second message.

31. (Currently Amended) The program product of claim 30 further comprising instructions for performing the steps of:

receiving a second request from said client system via said network;
retrieving ~~selected ones of~~ said ~~at least one~~ second message; and
generating a response to said a second request using said ~~selected ones of~~ said ~~at least one~~ second message.

32. (Currently Amended) The program product of claim 31 further comprising instructions for performing the step of sending said response to said a client system ~~initiating said first and second requests.~~

33. (Currently Amended) The program product of claim 27 further comprising instructions for performing the steps of:

receiving a connection request from said client system; and
opening a connection to said a client system, said connection being operable for communicating requests and responses to said requests.

34. (Currently Amended) The program product of claim 27 further comprising

instructions for performing the ~~steps~~ step of:

receiving a second request from said client system via said network, said second request selected from the group consisting of information (~~INFO~~) requests, expand requests and edit requests, wherein,

in response to ~~each of~~ said information requests, an HTML page is generated using a set of selected data for a tool object corresponding to a managed tool ~~is loaded into a WorldWideWeb ("Web") page~~ for sending to said a client system,

in response to ~~each of~~ said edit requests, an HTML page is generated a ~~Web page~~ having a portion operable for user entry of one or more values for modifying a tool object attribute ~~is generated~~ for sending to said client system, and

in response to ~~each of~~ said expand requests an HTML page is generated using a set of child object names and relations to a parent object identified in said each expand request ~~is generated~~ for sending to said client system.

35. (Currently Amended) The program product of claim 27 wherein said first type of said first request denotes an execute request.

36. (Original) The program product of claim 35 wherein said instructions for performing the step of sending said first message are performed in response to execution of a tool object method identified in said first request.

37. (Original) The program product of claim 36 further comprising instructions for performing the step of overriding said tool object method.

38. (Original) The program product of claim 37 wherein said instructions for performing the step of overriding said tool object method comprises instructions for performing the steps of:

parsing a script source;

determining if said script source includes a method signature matching a method signature of said tool object method; and

if so, executing a corresponding portion of said script source.

39. (Currently Amended) The method of claim 1 further comprising the steps step of:

receiving a second request from said client system via said network; and

generating an HTML page using loading a set of selected data for a tool object corresponding to a managed tool ~~into a WorldWideWeb ("Web") page~~ for sending to said a client system in response to said second request.

40. (Currently Amended) The method of claim 39 wherein said HTML Web page has a portion operable for user entry of one or more values for modifying a tool object attribute.

41. (Currently Amended) The data processing system of claim 15 further comprising:

circuitry operable for receiving a second request from said client system via said network; and

circuitry operable for generating an HTML page using loading a set of selected data for a tool object corresponding to a managed tool ~~into a WorldWideWeb ("Web") page~~ for sending to said a client system in response to said second request.

42. (Currently Amended) The data processing system of claim 41 43 wherein said HTML Web page has a portion operable for user entry of one or more values for modifying a tool object attribute.

43. (Currently Amended) The program product of claim 27 further comprising instructions for performing the steps of:

receiving a second request from said client system via said network; and

generating an HTML page using ~~loading~~ a set of selected data for a tool object corresponding to a managed tool ~~into a WorldWideWeb ("Web")~~ page for sending to said a client system in response to said second request.

44. (Currently Amended) The program product of claim ~~43~~ 44 wherein said HTML Web page has a portion operable for user entry of one or more values for modifying a tool object attribute.

45. (New) The data processing system of claim 15 wherein said first request is transferred in accordance with the hypertext transfer protocol (HTTP), and said portion corresponds to a uniform resource locator (URL).

46. (New) The program product of claim 27 wherein said first request is transferred in accordance with the hypertext transfer protocol (HTTP), and said portion corresponds to a uniform resource locator (URL).